Claims

WHAT IS CLAIMED:

1. A system comprising:

an engine having a first and second group of cylinders;

a sensor coupled to at least one of said first and second groups; and

a controller for operating the engine in a first mode with a mixture of air and substantially no injected fuel in the first combustion group and with air and injected fuel in the second combustion group, operating in second mode where both of said first and second groups combusts a mixture of air and injected fuel, and disabling adaptive learning of the sensor during said first mode and enabling said adaptive learning during the second mode.

2. The system recited in Claim 1 wherein said adaptive learning comprises calculating a correction value for said sensor; and when in said first mode, the second combustion group operates with a lean air-fuel ratio.

3. The system recited in Claim 2 wherein said sensor is an exhaust gas oxygen sensor.

4. The system recited in Claim 3 wherein said first and second cylinder groups have an equal number of cylinders.

5.   A method for operating an engine having a first and second group of cylinders, comprising:

operating in a first mode with the first cylinder group operating with air and substantially no injected fuel and the second cylinder group operating by combusting air and fuel, providing a request for enabling adaptive learning of a sensor coupled to the engine; and

in response to said request, disabling said first mode of operation and operating the engine in a second mode of operation.

6.   The method recited in claim 5, wherein said second mode of operation comprises operating both first and second cylinder groups with a combusted air-fuel mixture.

7.   The method recited in Claim 6 wherein said combusted air-fuel mixture of said second mode is substantially near stoichiometry.

8.   The method recited in Claim 5 wherein said sensor is coupled to an engine exhaust.

9.   The method recited in Claim 5 wherein said sensor is an exhaust air-fuel ratio sensor.

10.   The method recited in Claim 5 wherein said adaptive learning corrects for sensor errors.

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